

# THE QUEST TO IDENTIFY THE RELATIONSHIP BETWEEN TRAINING AND DEVELOPMENT INTERVENTIONS AND EMPLOYEE'S MOTIVATION: AN EMPIRICAL STUDY ON LEADING POWER SECTOR UNITS OF INDIA

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## ABSTRACT

*India, a developing nation poses vulnerable economies with the changing business scenario. 'Changing business scenario' demand 'organization change', to adapt in changing needs. Organization development interventions (ODI's) are used as change management tool to facilitate employees as well as organizations to improve and adapt in stringent situations. The paper is the study of training and development intervention (T&D) practiced by leading power sector organization catering Delhi NCR (NTPC & NHPC). Rising importance of T&D interventions paved direction to Government of India to frame 'training policy' for employees of power sector. Power sector largely affects the economy of country. Focus of research is to investigate the impact of indicators of training and development interventions (employee satisfaction, employee performance and career competencies) on employee's motivation working in power sector units located in Delhi NCR. Research is an attempt to find answer to three questions How T&D practices adopted by selected PSU's impact Motivation level of employee's? Identify the strength of relationship that exists between T&D and employee's motivation? Identify the important factor of training and development that affect employees' motivation? Primary data was collected from 500 employees from leading power sector units NTPC & NHPC offices located in Delhi NCR. The data was analyzed using SPSS software. Multiple regression analysis and correlation techniques are used to analyze the relationship among variables. Indicators of training and development interventions show positive and significant correlation with employee motivation. Analyses and findings provides crucial information related to impact of training and development intervention in employee motivation helping organization to develop and shape its employee as well. The study ends up concluding that there exists a positive relationship between training and development intervention and employee motivation.*

**KEYWORDS:** *Training & Development Interventions, Career Competencies, Employee Satisfaction, Employee Performance, Performance Gap & Career Path*

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## INTRODUCTION

Organizations today are facing challenges like vulnerable economies, fluctuating market conditions, stringent competition from rival firms and the changing external environment raising potential threats for organizations. In the competitive scenario organizations need 'change' to best fit in fluctuating needs and for the improvement of the organization. Organizations make uses of varied interventions popularly known as Organization Development Interventions (ODI's) as an organizational improvement strategy. Training and development intervention (T &D) are among the important interventions widely practiced by the organizations, influence

knowledge, skills and abilities of employees. These interventions play crucial role in the success of both organizations and employees. Government of India has identified the importance of T & D Interventions in context of rapid technological changes and social transformation taking place in country. The Government felt the need to develop 'training policy' to orient power sector personnel.

## TRAINING & DEVELOPMENT INTERVENTION: CONCEPTUAL FRAMEWORK

Different researchers were actively engaged in explaining the concept of Training both from the employees' and organizational perspectives. **Gordon, 1992** stated that "Training is a type of activity which is planned, systematic and it results in the enhanced level of skill, knowledge and competency that are necessary to perform work effectively. **J. Stewart Black and Hal. B. Gregersen (2000)** stated that "global leaders can be 'made', but it takes a training approach that is a serious and sophisticated, as the global world these individuals are being asked to lead in. Fundamentally global leaders require training programs that will help them radically redraw their provincial mental maps into global ones. European managers pointed out that even when people are born with gifted hands of playing the violin, their gift remains unrealized if they never touch the violin. The individual's full potential cannot be realized without opportunity and regular training". **Poh, 2001, Buckley and Caple, 2000** in their recent studies mentioned that "training is an essential element for sustainable competitive advantage and survival in the 21st century as it is the process of providing employees with specific skills or helping them to correct deficiencies in their performance. It can be defined as development of skills, specifies measurable objectives, and should result in observable change in behavior (Wagonhurst, 2003). Training is a systematic process, which helps people to learn how to be more effective at work by modifying knowledge, skills or attitudes through learning experience to achieve effective performance". **Yamhill & McClean, 2001** accepted that training truly makes a difference in organizational and individual performance and must understand how to support transfer of training in organizations. According to **Campbell & Kuncel, 2001** it is extremely important that employees benefit from ongoing employer provided training "One of the most frequently encountered human capital development interventions is training".

**Chiaburu & Teklab, 2005** defined Training, as "the planned intervention that is designed to enhance the determinants of individual job performance". "Training is related to the skills an employee must acquire to improve the probability of achieving the organization's overall business and academic goals and objectives. Positive training offered to employees may assist with reduction of anxiety or frustration, which most employees have experienced on more than one occasion during their employment careers" (**Cheng & Ho, 2001**). **Vanormelingen (2009) Colombo and Stanca (2008), Sepulveda (2005)** showed that training is a fundamental and effectual instrument in successful accomplishment of the firm's goals and objectives, resulting in higher productivity. But there is one important thing which is to be taken into account, training leads to productivity if the unobserved heterogeneity and potential endogeneity is controlled. Researchers **James G. Maxham, 2008** identifies that employee training is a learning experience that seeks relatively permanent change in employees that there improve job performance. Determination of the skill necessary to complete this work, identify deficiencies lies, have a grasp of the extent and nature of the training needs.

**Terry. I. Hansen, Aug 2010** considered that training incentives stimulates employee growth. **Noe, 2010** viewed training as a strategic human resource development and management issue in an organization. **Benedicta and Appiah, 2010** stated that "training plays an important role in the development of organization, improving performance as well as increasing productivity, and eventually putting companies in the best position to face competition and stay at the top. This means that, there is a significant difference between the organizations that train their employees and those organizations

that do not". According to **Maimunah, 2008; Noe et al., 2009; Vodde, 2012** training programs, human resource administrators work together with line managers to create appropriate training programs and improve the content and methods of training programs. After getting approval from top management, human resource administrators will jointly coordinate with line managers to implement the various types of training for the benefits of the organization and the employees. **Karia & Asaari (2006)** stated that training and education have been shown to have a significant positive effect on job involvement, job satisfaction, and organizational commitment. **Mohsin Nadeem (2010)** said that "Companies today are forced to function in a world full of change and complexity, and it is more important than ever to have the right employees at the right job with the right qualification and experience in order to survive the surrounding competition. The successful and prosperous future of an organization is dependent on its skilled, knowledgeable and well experienced workforce. That is why training is a fundamental and effectual instrument in successful accomplishment of the firm's goals and objectives. Training not only improves them resourcefully, but also gives them a chance to learn their job virtually and perform it more competently hence increasing firm's productivity".

## **SIGNIFICANCE OF TRAINING AND DEVELOPMENT INTERVENTION**

**Meyer and Allen, 1991** stated that Training practices used by organizations may have an effect, direct or indirect on both employee motivation and organizational commitment. **Dransfield, Howkins, Hudson and Davies (1996:55)** insist that "training fills the gap created between that which a person is able to do at a specific moment in time, and what he/she is able to do after applicable training has been given Individuals rely on some training to improve their current skills and to learn new skills". **Pfeffer and Veiga (1999)** emphasized "people as the most important assets of organizations. According to their findings, training employees initiates both the development of skills and behavioral scripts, in addition to the motivation to apply those skills and behavioral scripts in their in-role-related activities at work". According to **Struwig & Smith, 2000** training can be used to prepare employees to meet the challenges and changes in the workplace, and to upgrade and refine their skills. As per **Cooke, 2000** "Performance can be defined as the achievement of specified task measured against predetermined or identified standards of accuracy, completeness, cost and speed. In an employment contract, performance is deemed to be the accomplishment of a commitment in such a manner that releases the performer from all liabilities laid down under the contract. Efficiency and effectiveness are ingredients of performance apart from competitiveness and productivity and training is a way of increasing individual's performance". **Campbell and Kuncel (2001)**, and **Wright and Boswell (2002)** suggested that development trainings for employees may have a positive impact on both employee's individual performance and organizational performance when based on reflective and systematic planning. **Yamnill & McClean, 2001** observed training and development as a key factor in making it possible for an organization to achieve its strategic, business and operational goals (Carrell, Elbert, Hatfield, Grobler, Marx & van der Schyff, 2000:308), and therefore training outputs should emphasize performance. **Chiaburu and Tekleab, 2005** advocated that in today's business world, employee's skills which are necessary to do their job are only possible through training. Most of the companies train their employees in such a manner that would help them to sustain throughout their careers. This kind of training can lead to high levels of motivation and commitment by the employees, who actually see the opportunity they are given. Training is defined in the study "as the planned intervention that is designed to enhance the determinants of individual job performance".

**Dysvik and Kuvaas (2008)** investigated alternative relationships between training opportunities and employee outcomes in the form of task performance, citizenship behavior and turnover intention. They presented both positive and

negative implications for the relationship between employee training and development and employee outcomes. At the positive side, they revealed little consistency between demographic variables, perceptions of training opportunities and employee outcomes, suggesting that a diverse mix of employees may react positively toward employee training and development efforts. Nevertheless, at the negative side there is a lack of a direct relationship between perceived training opportunities and employee outcomes, and that this relationship is mediated by work intrinsic motivation. **Noe, 2010; Nijman et al., 2006** If these training programs are to be properly administered this will help employees to upgrade their capabilities in terms of cognitive, affective, psychomotor and good moral values. Hence, it may lead employees to maintain and support the organizational strategy and goals. **Noe, 2010; Noe et al., 2009**. Traditionally, human resource administrators design many types of training programs to develop basic skills and apply them in order to overcome immediate job problems and increase daily job performance. This training approach is suitable to organizations that operate in less competitive environments and market stability.

**Vodde, 2012** In the workplace, the various types of on the job and off the job training programs are planned and implemented by employers to enhance employees' knowledge, skills, abilities (KSAs) and positive attitude in order to support the organizational goals, expectations and needs.

**Vandana Sharma, Manisha Shirsath (2014)**. Training typically focuses on providing employees with specific skills or helping those correct deficiencies in their performance. Employee business training for our personnel will not only equip them, but it can also be an excellent source of employee motivation.

## **TRAINING & DEVELOPMENT: EFFORTS BY THE GOVERNMENT OF INDIA TO TRAIN POWER SECTOR PERSONNEL**

'National Training Policy for power sector' was formulated in June 2002 by the Ministry of Power, Government of India. The policy was formulated considering the need for training to achieve high productivity and customer satisfaction. The nodal agency for training was department of personnel and training (DoPT). The DoPT issued guidelines to implement the 'training policy' for its employees in 1996. Chairman of Central Electricity Authority, Ministry of Power submitted as report of 'Committee on Training' in 1985. Present power sector training activities are based on the parameters of report of committee. The present status and the areas of concern in 'National Training Policy' are

- Training Culture.
- Training infrastructure.
- Training institute recognized by CEA (Lineman training centers, training facilities at national level)
- Training Records
- Training need assessment/ job analysis
- Non availability of adequate training for hydropower personnel
- Lack of emphasis on training in transmission and distribution
- Training in renewable & non conventional source of energy
- Under-utilization of training facilities

- Reviews/ evaluation of training programs
- Simulator training
- Management training
- Attitudinal changes/ behavioral sciences
- Impact of reforms
- Implication of reforms for training
- Regulatory commissions
- Training in information technology
- Inadequacy of trainers and insufficient career development option
- Training for contract labor.

The basic philosophy on which guidelines of “National training policy for power sector” has been devised is:

- Training for all
- Top management commitment
- Training an investment
- Training for all cadres (lowest to highest)
- MoU with reforming states
- Training for transmission and distribution personnel
- Research in training
- Training plan
  - Prepare matrix of standardized performance parameters
  - Periodical training need analyses
  - Identifying planned training intervention for each level
  - Formulate cadre training plan
  - Prepare training action plan
  - Finalize strategies and approaches
- Educational up gradation plan
- Management development programs
- Training organization structure
- Creating training infrastructure

- Training management information system (TMIS)
- Training Budget
- Training allowance
- Networking of training facilities
- Feedback
- Distance education
- Case studies depository
- Training on reforms
- ISO 9000 certification
- Training at manufacturers work
- Simulator training
- Training for contract labor
- Training in disaster management
- Training abroad

So, the policy addressed wide ranging issues to bring reforms in Indian power sector. As per statistics of NPTI (national power training institute) Various Schemes under the 11th Plan towards Training were operative like Training under Distribution Reforms, Upgrades and Management (DRUM), C&D Employees Training, Franchisee Training, Training under R-APDRP etc

**Table 1.1: Salient Features of Schemes'**

Scheme 11th Plan 12th Plan				
Target Amount for Investment(Rs)	No of Employees Trained (A/B/C/D LEVEL WISE)	Amount Sanctioned	Amount Disbursed	Target no of Employees to be Trained
DRUM approx 2Cr	A&B 31000	Rs.16.8Cr	Rs 13.5 Cr	5000
RGGVY C&D 22.5Cr	57446	Rs 18.75Cr	Rs 10 Cr	75000 (cumulative for 11 & 12th plan)
RGGVY Franchisee 25Cr	32717	Rs 10 Cr	Rs 4.12 Cr	50,000 (cumulative for 11 & 12th plan)
R-APDRP Part 90Cr	(A&B) 650 (C&D)16370	Rs 200Cr	Rs 7.9Cr	32000

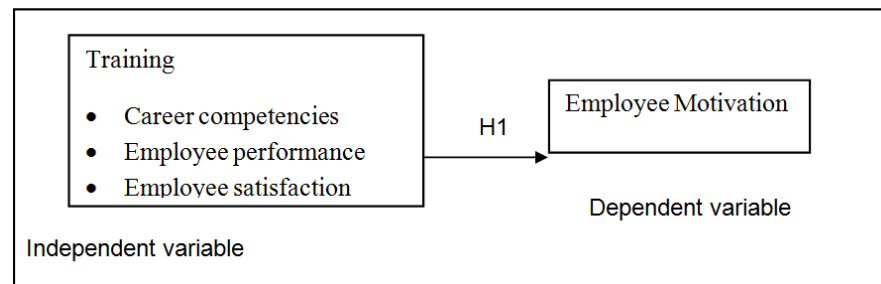
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## CONCEPTUAL FRAMEWORK AND RESEARCH HYPOTHESIS

### Theoretical Framework

Extensive literature survey on training and development intervention gave information on different variables.

Training and development interventions have an impact on variables like employee satisfaction, employee performance and career competencies. We tested the influence of these variables on employee motivation.



**Figure 1.1: Theoretical Framework of Research**

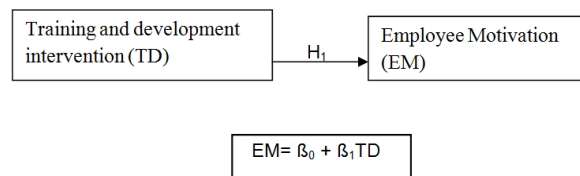
### Research Questions & Hypothesis

The research probes to find the answer to following questions:

- How T&D practices adopted by selected PSU's impact Motivation level of employee's?
- Identify the strength of relationship that exists between T&D and employee's motivation?
- Identify the important factor of training and development that affect employees' motivation?

The hypothesis statement is:

Training & Development Intervention significantly correlated with Motivation



**H<sub>0</sub>** = There is no impact of training and development intervention on employee motivation

**H<sub>1</sub>** = There is positive and significant correlation between Training and development intervention and employee motivation

### Research Approach

The present research study is an exploratory research design. *Simple Random Sampling* and *Convenience Sampling* are used in the study. Research instrument used is structured Questionnaire with 12 close ended questions. **Ordinal scale** of measurement with, '**5 Point**' **Likert Scale** is used in questionnaire. Two criteria that helps in ascertaining the goodness of scale is a) reliability b) validity. **Cronbach alpha technique** is used to test reliability. Cronbach alpha is.801 for 12 items. **Pilot testing** is done to check the validity of questionnaire. In this research for pilot testing, 40 questionnaires were administered; respondents were informed that questionnaire is a 'pilot' for a larger study. In data collection step, decision is taken regarding selecting the techniques to collect relevant information, required to solve research problem there are different techniques to collect data. Primary data was collected through questionnaire, mailed questionnaire and observation. Secondary data was collected through HR manual, annual report, books and newspaper. Indicators for Training and development identified after extensive literature review. Indicators of Motivation identified

from questionnaire developed by Adam, 2015.

*Research Question 1* To study the impact of T&D Intervention on employee motivation structured questionnaire was prepared and was distributed among 500 employees (NTPC, NHPC). Data received from the survey was subjected to correlation analysis. Correlation analysis helps in identifying the relationship existing between two variables i. e. positive or negative. *Question 2* The strength of relationship between T&D and employee motivation is studied through multiple regression analysis conducted by the use of software SPSS. *Question 3* descriptive statistics helps in identifying important factors affecting employees' motivation and to give ranking to the variables. *Hypothesis* is tested using Pearson correlation.

### Data Analysis

*Correlation analysis* helps in identifying the relationship between T&D Interventions and employee motivation. The nature of relationship as depicted from correlation analysis is shown in table below. Results show that positive correlation exists between all the variables of training and development and 15 variables of motivation. 5 motivational variable shows slightly negative correlation and these variables can be discarded. T1- T12 is indicators of Training & Development Intervention while M1- M20 is motivational variables.

**Table 1.2: Correlation Analysis Training and Development Intervention and Employee Motivation**

	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10
T1	.496	.408	.346	.479	.398	.402	.438	.344	.391	.104
T2	.297	.737	.370	.436	.408	.423	.434	.433	.402	.144
T3	.278	.391	.714	.393	.422	.408	.413	.415	.409	.170
T4	.447	.533	.429	.758	.432	.459	.505	.468	.490	.147
T5	.351	.460	.419	.434	.749	.343	.361	.390	.499	.175
T6	.403	.507	.442	.406	.346	.747	.402	.370	.410	.138
T7	.341	.513	.370	.473	.403	.338	.725	.368	.421	.124
T8	.280	.470	.425	.419	.372	.400	.363	.806	.365	.133
T9	.404	.518	.451	.509	.544	.422	.448	.388	.840	.136
T10	.092	.145	.188	.129	.176	.141	.112	.122	.125	.977
T11	.439	.621	.475	.577	.478	.510	.520	.456	.527	.133
T12	.468	.513	.476	.497	.435	.438	.486	.462	.460	.142
	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20
T1	.348	.372	.354	.304	.444	-.054	-.068	.027	.032	.022
T2	.377	.454	.380	.333	.408	-.014	-.030	.016	.026	-.013
T3	.350	.391	.420	.288	.416	-.028	-.054	-.054	-.041	-.050
T4	.450	.471	.430	.379	.484	-.040	-.016	.030	.042	.023
T5	.359	.334	.389	.353	.393	-.076	-.065	.018	-.008	-.004
T6	.461	.368	.403	.353	.465	-.044	.017	-.026	-.038	-.064
T7	.357	.400	.309	.326	.433	-.007	-.070	.037	.027	.014
T8	.347	.386	.389	.367	.449	-.037	-.038	-.022	-.021	-.035
T9	.452	.355	.388	.418	.436	-.036	-.016	-.026	-.033	-.017
T10	.067	.111	.127	.120	.138	-.001	-.144	.018	.020	.012
T11	.696	.399	.406	.421	.532	-.093	-.021	-.013	-.002	-.024
T12	.357	.728	.333	.356	.517	-.025	-.032	.050	.051	.031

T1= Professional development, T2= Job, T3= Opportunity, T4= Work Confidence, T5= Future Career, T6= Competencies, T7= Performance Gaps, T8= Performance Recognition, T9= Employee Morale, T10= Business Goals, T11= Technical Skills, T12= Career path.

M1= Interest, M2= Ethics, M3= Growth, M4= Flexibility, M5= Independence, M6= Achievement, M7= Business, M8= Pressure, M9= Customers, M10= Activity, M11= Management, M12= Competition, M13= Teamwork, M14= Power, M15= Status, M16= Progression, M17= Recognition, M18= Fear of Failure, M19= Remuneration, M20= Job security



Multiple Regression Analysis helps to find nature of relationship. This help in determining cause and effect relationship between variables. Values of dependent variable are predicted from values of independent variables. Equation for multiple regression analysis:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 \dots \beta_n X_n$$

Y = Employee Motivation; X1-Xn = Variables of T& D Intervention; n=12

**Table 1.3: Multiple Regression Analysis Results**

Model	Dependent Variable(DV)	R	R Square	Adjusted R Square	Standard Error of Estimate	F
1	Interest (M1)	0.622	0.387	0.372	0.556	25.64
2	Ethics (M2)	0.816	0.666	0.657	0.464	86.77
3	Growth(M3)	0.759	0.575	0.565	0.519	55.01
4	Flexibility(M4)	0.798	0.637	0.629	0.468	71.09
5	Independence(M5)	0.788	0.621	0.612	0.502	66.53
6	Achievement(M6)	0.776	0.602	0.592	0.481	61.45
7	Business(M7)	0.776	0.603	0.593	0.500	61.53
8	Pressure(M8)	0.825	0.681	0.673	0.486	86.44
9	Customers(M9)	0.857	0.734	0.727	0.415	111.81
10	Activity(M10)	0.978	0.956	0.955	0.514	875.21
11	Management(M11)	0.714	0.509	0.497	0.590	42.10
12	Competition(M12)	0.748	0.559	0.548	0.526	51.42
13	Teamwork(M13)	0.573	0.328	0.312	0.674	19.83
14	Power(M14)	0.532	0.283	0.265	0.724	16.02
15	Status(M15)	0.670	0.448	0.435	0.565	32.98
16	Progression(M16)	0.128	0.016	-0.008	1.12	0.675
17	Recognition(M17)	0.182	0.033	0.009	1.08	1.39
18	Fear of failure (M18)	0.131	0.017	-0.007	1.28	0.711
19	Remuneration(M19)	0.132	0.017	-0.007	1.28	0.717
20	Job Security (M20)	0.126	0.016	-0.008	1.27	0.656

The survey response helps in identifying the percentage count for each question in a questionnaire. Table below shows the count percentage obtained from survey.

**Table 1.4: T&D Variable Count & Percentage Analysis of Survey Responses**

QUESTIONS (Items in Questionnaire )	SD		DS		UNC		AG		SA	
	Count	Per	Count	Per	Count	Per	Count	Per	Count	Per
Training provided by the organization encourages your professional development	0	0	0	0	59	11.8	156	31.2	285	57
Your organization provides you training that assist you in performing your job well	0	0	2	0.4	110	22	154	30.8	234	46.8
Your organization provides you an	0	0	4	0.8	97	19.4	152	30.4	247	49.4

opportunity for professional development within company										
You feel confident in the work assigned to you in your organization	0	0	1	0.2	95	19	129	25.8	275	55
Training increases organization reliability for the reason that employees recognize their organization is spending in their future career	0	0	3	0.6	80	16	160	32	257	51.4
Do you feel that training program conducted by your organization helps in improving competencies	0	0	1	0.2	86	17.2	136	27.2	277	55.4
The implementation of training programs helps in bridging performance gaps	0	0	2	0.4	96	19.2	138	27.6	264	52.8
Training facilitates the organization to recognize its workers performance.	0	0	11	2.2	88	17.6	134	26.8	267	53.4
Training helps in boosting employees morale	0	0	5	1	90	18	134	26.8	271	54.2
Does training program helps in knowing which competencies the future workforce must possess to achieve business goals	0	0	7	1.4	95	19	121	24.2	277	55.4
Employees learn soft and technical skills through training provided by the organization	0	0	2	0.4	85	17	128	25.6	285	57
Training programs help employees to establish bright career path.	0	0	1	0.2	94	18.8	120	24	285	57

*SD – Strongly Disagree, DIS – Disagree, UNC – Uncertain, AG – Agree, SA – Strongly Agree, PER – Percentage*

Descriptive statistics is used to calculate mean and standard deviation. Mean value help in providing rank to the variable. Rank given to variables from 1-12.

**Table 1.5: Descriptive Statistics Results**

Sl. No.	Factors	Disagree	Agree	Rank	Mean	Std. Deviation	Variance
1	Individual's professional development	0	441	1	4.4520	.69618	0.485
2	Job performance	2	388	10	4.2400	.80480	0.648
3	Professional development within company	4	399	8	4.2840	.80039	0.641
4	Confidence	1	404	5	4.3560	.78899	0.623
5	Organization's reliability	3	417	2	4.3420	.76302	0.582
6	Individual's competencies	1	413	3	4.3780	.76961	0.592
7	Performance Gap	2	402	6	4.3280	.79352	0.630
8	Performance recognition by organization	11	401	7	4.3140	.83714	0.701
9	Morale	5	405	4	4.3420	.80395	0.646
10	Identifying future workforce competencies	7	398	9	4.4360	2.41279	5.822
11	Soft and technical skills	2	413	3	4.3920	.77688	0.604
12	Career path	1	405	4	4.3780	.79017	0.624

## RESULT ANALYSIS AND DISCUSSION

The correlation analysis helps us in finding the nature of relationship i. e positive and negative existing between T&D intervention and employee motivation. High degree of correlation range from 0.7 to +1, moderate degree range from 0.25-0.6 and low correlation from 0 to 0.25 while no absence of correlation when value is zero. The data once analyzed helps us in understanding the relationship, and the results are as shown below:

**Table 1.6: Variables with Positive and High Degree of Correlation**

T2 –M2	Job Competence & Ethics	Positive and high degree of correlation
T4-M4	Work confidence &Flexibility	Positive and high degree of correlation
T6-M6	Competence & achievement	Positive and high degree of correlation
T7-M7	Performance Gap & recognition	Positive and high degree of correlation
T9-M9	Employee morale & customers	Positive and high degree of correlation
T10-M10	Business goals & activity	Positive and high degree of correlation
T12-M12	Career path and competition	Positive and high degree of correlation

**Table 1.7: Variables with Positive and Moderate Degree of Correlation**

	Indicators of T&D	Degree of correlation
Interest	T1, T2, T3, T4, T5, T6, T7, T8, T9, T11	Positive and moderate degree
Ethics	T1, T3, T4, T5, T6, T7, T8, T9, T12	Positive and moderate degree
Growth	T1, T2, T4, T5, T6, T7, T8, T9, T11, T12	Positive and moderate degree
Flexibility	T1, T2, T3, T5, T6, T7, T8, T9, T11, T12	Positive and moderate degree
Independence	T1, T2, T3, T4, T6, T7, T8, T9, T11, T12	Positive and moderate degree
Achievement	T1, T2, T3, T4, T5, T7, T8, T9, T11, T12	Positive and moderate degree
Business	T1, T2, T3, T4, T5, T6, T8, T9, T11, T12	Positive and moderate degree
Pressure	T1, T2, T3, T4, T5, T6, T7, T9, T11, T12	Positive and moderate degree
Customers	T1, T2, T3, T4, T5, T6, T7, T8, T11, T12	Positive and moderate degree
Management	T1, T2, T3, T4, T5, T6, T7, T8, T9, T12	Positive and moderate degree
Competition	T1, T2, T3, T4, T5, T6, T7, T8, T9, T11	Positive and moderate degree
Teamwork	T1, T2, T3, T4, T5, T6, T7, T8, T9, T11, T12	Positive and moderate degree
Power	T1, T2, T3, T4, T5, T6, T7, T8, T9, T11, T12	Positive and moderate degree
Status	T1, T2, T3, T4, T5, T6, T7, T8, T9, T11,	Positive and moderate degree

**Table 1.8: Variables with low Degree of Correlation**

Variable ( Motivation & Training)	Degree of Correlation
M1-T10	Low degree of correlation
M2- T10	Low degree of correlation
M3- T10	Low degree of correlation
M4-T10	Low degree of correlation
M5-T10	Low degree of correlation
M6-T1	Low degree of correlation
M7-T10	Low degree of correlation
M8-T10	Low degree of correlation
M9- T10	Low degree of correlation
M10- (T1-T12)	Low degree of correlation
M11-T10	Low degree of correlation
M12-T10	Low degree of correlation
M13-T10	Low degree of correlation
M14-T10	Low degree of correlation
M15-T10	Low degree of correlation
M17-T6	Low degree of correlation
M18-T1, T2, T5, T7, T10, T12	Low degree of correlation
M19- T1, T2, T4, T7, T10, T12	Low degree of correlation
M20- T1, T4, T7, T10, T12	Low degree of correlation

*T1= Professional development, T2= Job, T3= Opportunity, T4= Work Confidence, T5= Future Career, T6= Competencies, T7= Performance Gaps, T8= Performance Recognition, T9= Employee Morale, T10= Business Goals, T11= Technical Skills, T12= Career path.*

*M1= Interest, M2= Ethics, M3 = Growth, M4= Flexibility, M5= Independence, M6= Achievement, M7= Business, M8= Pressure, M9= Customers, M10= Activity, M11 = Management, M12= Competition, M13= Teamwork, M14= Power, M15= Status, M16= Progression, M17= Recognition, M18= Fear of Failure, M19= Remuneration, M20= Job security*

In multiple regression analysis *R* is measure of correlation that exists between observed value and predicted value of criterion value. For example, the correlation between levels of QWL reported by participants and the levels predicted for them by predictor variables. *R Square*, it is the square of relation, as discussed, *R square* value indicates proportion of variance in criterion variable which is accounted for by our model- example proportion of variance in motivation scores accounted by our set of predictor variables (physical working condition etc) i. e., we can say, *R square* is a measure of how good a prediction of criterion variable we can make by knowing predictor variable. *Adjusted R Square* value takes into account number of variables in the model and number of observations (participants) our model is based on. If *Adjusted R Square* value is .65, we can say our model has accounted for 65% of variance in criterion variable.

*Descriptive analysis* helps in ranking the variables like from most important predictor variable to least important. Individual's professional development -1, Organization's reliability -2, Individual's competencies -3, Morale -4, Confidence-5, Performance Gap -6, Performance recognition by organization -7, Professional development within company -8, Identifying future workforce competencies -9, Job performance -10,

## RECOMMENDATIONS

The extensive research Training & Development intervention specifies the importance of the intervention on employee motivation. The following recommendations can be proposed based on the research conducted on public sector organizations

- Every organization should have specific OD consultant that can easily identify the problems arising in the organization and can solve problems by the implementation of training & development intervention.
- Training & Development intervention is important not only in employees term but is also important in organization respect.
- Organizations should have proper training cell that can take the responsibility to train the workforce efficiently.

### **Limitations and Scope of Study**

Conducting research is itself a strenuous task and every research has its own limitations:

- Taking responses from employees of PSU's was a time consuming activity.
- Some employees do not find the questionnaire filling a healthy exercise.
- HR department of the organizations shows their reluctance in sharing their HR manual to study organizations rules and regulation.
- Data collection was time consuming activity.
- Officers working at senior positions in Public Sector Enterprises often does not respond positively

The scope of study is:

- Research study paved path for more research on other OD interventions.
- Study emphasized the importance of OD interventions both for employees as well in organizational context
- Research project streamlined the basic training process adopted by the PSU's. There is further a scope in modification of process outlined by the public sector organizations.
- This research work highlighted the important parameters of training and development that enhance employee motivation

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